

WHAT IS CLAIMED IS

- 1 1. A radiation therapy device, comprising:
  - 2 a radiation source positioned to direct a beam along a beam path
  - 3 toward a treatment area;
  - 4 a treatment head containing a first collimator controllable to
  - 5 selectively collimate said beam; and
  - 6 a second collimator removably positioned between said first
  - 7 collimator and said treatment area and controllable to selectively collimate
  - 8 said beam.
- 1 2. The radiation therapy device of claim 1, wherein said second
- 2 collimator is removably mounted on an accessory tray of said radiation
- 3 therapy device.
- 1 3. The radiation therapy device of claim 2, further comprising a first
- 2 collimator drive and a second collimator drive, each said drive operable to
- 3 selectively position individual leafs of said collimators.
- 1 4. The radiation therapy device of claim 3, wherein said second
- 2 collimator drive is removably mounted on said accessory tray.
- 1 5. The radiation therapy device of claim 4, wherein said second
- 2 collimator drive is positioned on an exterior of said accessory tray a
- 3 distance from said beam path.
- 1 6. The radiation therapy device of claim 1, wherein said radiation
- 2 source includes a photon radiation source and an electron radiation
- 3 source.

1 7. The radiation therapy device of claim 2, wherein said first collimator  
2 is controllable to selectively collimate a photon beam generated by said  
3 photon radiation source.

1 8. The radiation therapy device of claim 2, wherein said second  
2 collimator is controllable to selectively collimate an electron beam  
3 generated by said electron radiation source.

1 9. The radiation therapy device of claim 1, wherein said first and said  
2 second collimators are controllable to selectively collimate said beam.

1 10. The radiation therapy device of claim 1, further comprising:  
2 a helium-filled container, positioned along said beam path between  
3 said beam source and said second collimator.

1 11. The radiation therapy device of claim 1, further comprising a control  
2 unit coupled to said radiation source and to said first and said second  
3 collimator drives to selectively deliver a prescribed dose of radiation to said  
4 treatment area.

1 12. The radiation therapy device of claim 11, wherein said control unit is  
2 operable to control said radiation source to generate a photon beam and to  
3 cause said second collimator drive to position leaves of said second  
4 collimator away from said beam path to deliver a prescribed dose of photon  
5 radiation to said treatment area.

1 13. The radiation therapy device of claim 11, wherein said control unit is  
2 operable to control said radiation source to generate an electron beam and  
3 to cause said first collimator drive to position leaves of said first collimator

4 away from said beam path to deliver a prescribed dose of electron  
5 radiation to said treatment area.

1 14. A radiation therapy device, comprising:  
2 a control unit;  
3 a radiation source, controlled by said control unit to generate one of  
4 a photon beam and an electron beam along a beam path toward a  
5 treatment area;  
6 a first collimator, positioned between said radiation source and said  
7 treatment area, said first collimator selectively positioned by said control  
8 unit to collimate said photon beam; and  
9 a second collimator, removably mounted between said first  
10 collimator and said treatment area, said second collimator selectively  
11 positioned by said control unit to collimate said electron beam.

1 15. The radiation therapy device of claim 14, wherein said second  
2 collimator is removably mounted on an accessory tray of said radiation  
3 therapy device.

1 16. The radiation therapy device of claim 14, further comprising:  
2 a container positioned along said beam path between said first and  
3 second collimators.

1 17. The radiation therapy device of claim 16, wherein said container is  
2 filled with helium.

1 18. The radiation therapy device of claim 15, further comprising drive  
2 electronics coupled between said control unit and said second collimator,  
3 said drive electronics mounted on an exterior of said accessory tray, and  
4 operable to position individual leaves of said second collimator.

1 19. A radiation therapy system, comprising:  
2 a control unit;  
3 a treatment head having an enclosed area and an accessory tray;  
4 a photon radiation source, selectively operated by said control unit  
5 to generate a photon beam along a beam path from said treatment head  
6 toward a treatment zone;  
7 an electron radiation source, selectively operated by said control  
8 unit to generate an electron beam along said beam path from said  
9 treatment head toward said treatment zone;  
10 a photon collimator, located between said photon radiation source  
11 and said treatment zone; and  
12 an electron collimator, removably mounted on said accessory tray,  
13 said electron collimator selectively positioned by said control unit to  
14 collimate said electron beam.

1 20. An electron collimator for use in collimating an electron beam in a  
2 radiation therapy device, the collimator comprising:  
3 drive electronics, removably mounted on an exterior of an accessory  
4 tray of said radiation therapy device; and  
5 a plurality of leaves positionable by said drive electronics to move  
6 across a path of said electron beam, said plurality of leaves removably  
7 mounted on said accessory tray of said radiation therapy device.

1 21. A radiation therapy device, comprising:  
2 a radiation source positioned to selectively direct an electron beam  
3 and a photon beam along a beam path toward a treatment area;  
4 a treatment head containing a first collimator controllable to  
5 selectively collimate said photon beam; and  
6 a second collimator positioned between said first collimator and said  
7 treatment area and controllable to selectively collimate said electron beam.

1       22. A radiation therapy method, comprising:  
2           operating a radiation source to direct a beam from a treatment head  
3       along a beam path toward a treatment area;  
4           selectively controlling a first collimator to collimate said beam;  
5           selectively controlling a second collimator to collimate said beam,  
6       said second collimator removably positioned between said first collimator  
7       and said treatment area.

1       23. A radiation therapy method, comprising:  
2           selecting between an electron treatment beam and a photon  
3       treatment beam;  
4           directing said selected beam from a radiation source along a beam  
5       path toward a treatment area;  
6           selectively controlling a first collimator to collimate said selected  
7       beam if said selected beam is said photon beam; and  
8           selectively controlling a second collimator to collimate said selected  
9       beam if said selected beam is said electron beam, wherein said second  
10      collimator is positioned between said first collimator and said treatment  
11      area.